



Indian Institute of Technology Tirupati
&
Dalhousie University

jointly organize

An Indo-Canadian Symposium on Water: Purification, Optimization and Management

17th - 18th
March 2022

Funded

through

Shastri Conference & Lecture Series Grant

by



L'INSTITUT SHASTRI INDO-CANADIAN
INDO-CANADIEN INSTITUTE



Important Dates

FEB 18, 2022

Registration Opens

FEB 18, 2022

Abstract Submission Opens

MAR 1, 2022

Deadline for Abstract Submission

MAR 7, 2022

Notice of Acceptance of Abstracts

MAR 11, 2022

Registration Closes



About the Symposium

Indian Institute of Technology Tirupati, along with the Faculty of Agriculture and Industrial Engineering of Dalhousie University jointly organize the first symposium on the theme “Water: Purification, Optimization, and Management”.

Global demand for fresh and potable water has been on the rise and nearly doubled every 15-20 years. Millions of people all over the world have been facing a severe water shortage. To meet the demand, (a) water treatment and purification systems including desalination of seawater, (b) optimal distribution and management of the available water resources including efficient design of water distribution networks.

In the first part, an integrated approach that synergizes reverse osmosis, membrane distillation, and advanced oxidation will be brainstormed. On the other hand, treating effluent water minimizes the water requirements for industrial use and hence, the potential of advanced oxidation processes will be discussed. Secondly, the need for optimal design, operation, and digitization of the water distribution network will be highlighted. This is critical for ensuring the supply of water permanently, especially in smart cities. In this symposium, we aim at bringing expertise from this diverse spectrum to enlighten the research community on modern methods and recent trends.

Invited Speakers

Dr. Jesse Ronquillo

North Island College, Canada

Title: Purifying Water In Commercial Tilapia Production Using Advanced Recirculating Aquaculture System In Canada

Dr. Lakshmeesha Upadhyaya

A King Abdullah University Of Science And Technology (Kaust), Saudi Arabia

Title: Nanostructured Magneto Responsive Membranes From Block Copolymers Through Polymerization Induced Self-Assembly for Water Purification

Prof. B S Murthy

Indian Institute Of Technology Madras, India

Title: Research Needs in Urban Water Supply

Dr. Narendra Singh

Indian Institute Of Technology Tirupati, India

Title: One-Dimensional Metal Oxide Nanostructures And Their Composites For Waste Water Treatment Applications

Dr. Renu V

Indian Institute Of Technology (ISM) Dhanbad, India

Title: Sustainable Groundwater Management - Role of Numerical Models

Prof. Sridharakumar Narasimhan

Indian Institute Of Technology Madras, India

Title: Digital Water Network Management

Dr. Tri Nguyen-Quang,

Dalhousie University, Canada

Title: Toxic Algal Blooms In Water Resources: A Message Of The Mother Nature To Human Activities

Dr. Young Ki Chang,

Dalhousie University, Canada

Title: Remote Sensing and GIS Applications for Water

Organizers

Symposium Director

Dr.M.Nabil

Team Members

Prof. Raghavarao KSMS

Dr. Narendra Singh

Dr. Roshan Karan Srivatsav

Prof. Uday Venkatadri

Dr. Tri Nguyen-Quang

Dr. Young Ki Chang

Technical Committee

Dr. Anki Reddy

Dr. Anil Babasaheb Vir

Dr. Shamik Misra

Dr. Uday Kumar Sukumar

Pre- Registration

Papers on the relevant topics of the symposium theme “Water: Purification, Optimization, and Management” are invited. Prospective authors should submit a half-a-page abstract to wpom2022@iittp.ac.in. The abstract should not exceed 300 words. The name of the corresponding author should be highlighted with affiliation and email address. Research scholars are strongly encouraged to participate. Three cash prizes worth Rs. 2000 each for the best presentations by the students.

Registration

There is no registration fee for attending and participating in the symposium. The symposium will be held in hybrid mode. Due to prevailing covid restrictions, offline mode is permitted only for 35 students from IIT Tirupati. External participants should register for online mode only. An e-certificate will be provided to all participants.



An Indo-Canadian Symposium on
“Water: Purification, Optimization and Management”

Program Details

| Time (IST) | Time (AST) | Day 1 (Date: March 17, 2022) |
|-------------------|---------------------|--|
| 5:30 - 6:00 PM | 8:00 - 8:30 AM | Introductory Remarks <ul style="list-style-type: none"> - Director - IITT - DAL Representative - Representative Shastri Indo-Canadian Institute |
| 6:00 - 6:30 PM | 8:30 - 9:00 AM | Talk 1: Toxic Algal Blooms In Water Resources: A Message Of The Mother Nature To Human Activities <i>Dr. Tri Nguyen-Quang, Dalhousie University, Canada</i> |
| 6:30 - 7:00 PM | 9:00 - 9:30 AM | Talk 2: One-Dimensional Metal Oxide Nanostructures And Their Composites For Waste Water Treatment Applications <i>Dr. Narendra Singh, Indian Institute Of Technology Tirupati, India</i> |
| 7:00 - 7:30 PM | 9:30 - 10:00 AM | Talk 3: Research Needs in Urban Water Supply <i>Prof. B S Murthy, Indian Institute Of Technology Madras, India</i> |
| 7:30 - 7:45 PM | 10:00 - 10:15 AM | Break |
| 7:45 - 9:00 PM | 10:15 -11:30 AM | Student Presentations |
| 9:00 - 9:30 PM | 11:30 - 12:00 AM | Talk 4: Purifying Water In Commercial Tilapia Production Using Advanced Recirculating Aquaculture System In Canada <i>Dr. Jesse Ronquillo, North Island College, Canada</i> |

An Indo-Canadian Symposium on
“Water: Purification, Optimization and Management”

Program Details

| Time (IST) | Time (AST) | Day 2 (Date: March 18, 2022) |
|-------------------|---------------------|--|
| 5:30 - 6:00 PM | 8:00 - 8:30 AM | Talk 5: Digital Water Network Management <i>Prof. Sridharakumar Narasimhan, Indian Institute Of Technology Madras, India</i> |
| 6:00 - 6:30 PM | 8:30 - 9:00 AM | Talk 6: Remote Sensing and GIS Applications for Water <i>Dr. Young Ki Chang, Dalhousie University, Canada</i> |
| 6:30 - 7:00 PM | 9:00 - 9:30 AM | Talk 7: Nanostructured Magneto Responsive Membranes From Block Copolymers Through Polymerization Induced Self-Assembly for Water Purification <i>Dr. Lakshmeesha Upadhyaya, A King Abdullah University Of Science And Technology (Kaust), Saudi Arabia</i> |
| 7:00 - 7:15 PM | 9:30 - 9:45 AM | Break |
| 7:15 - 8:30 PM | 9:45 - 11:00 AM | Student Presentations |
| 8:30 - 9:00 PM | 11:00 - 11:30 AM | Talk 8: Sustainable Groundwater Management - Role of Numerical Models <i>Dr. Renu V, Indian Institute Of Technology (ISM) Dhanbad, India</i> |
| 9:00 - 9:15 PM | 11:30 - 11:45 PM | Concluding Remarks <ul style="list-style-type: none"> - IITT/DAL Representatives - OIA, IITT - Vote of Thanks, HoD Chemical |